



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL

MAY 07 1998

INJECTION WELL PERMIT APPLICATION
(TO DRILL, DEEPEN, PLUG BACK, OR CONVERT AN EXISTING WELL)

RECEIVED

MAY 07 1998

NOTE ▶ Permit approval for **drilling only, not injection**. Approval or denial for injection determined after Mechanical Integrity Test results reviewed and official notification given.

MO Oil & Gas Council

☒ APPLICATION TO DRILL ☐ DEEPEN ☐ PLUG BACK ☐ CONVERSION

NAME OF COMPANY OR OPERATOR

Pense Bros Drilling Co Inc

DATE

ADDRESS

800 Newberry St

CITY

Fredricktown

STATE

MO

ZIP CODE

63645

DESCRIPTION OF WELL AND LEASE

NAME OF LEASE

Honsinger

WELL NUMBER

3-W

ELEVATION (GROUND)

950

WELL LOCATION

(GIVE FOOTAGE FROM SECTION LINES)

2720

FT. FROM (N) (S) SEC. LINE

2300

FT. FROM (E) (W) SEC. LINE

WELL LOCATION

SECTION

5

TOWNSHIP

43N

RANGE

33w

COUNTY

Cass

NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE see map FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED — FOR WELL ON THE SAME LEASE 180 FEET

PROPOSED DEPTH

300

ROTARY OR CABLE TOOLS

Rotary

DRILLING CONTRACTOR, NAME AND ADDRESS

Town Oil Co.

16205 W. 287, Paola, KS. 66071

APPROX. DATE WORK WILL START

9-5-97

NUMBER OF ACRES IN LEASE

192

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR 12

NUMBER OF ABANDONED WELLS ON LEASE 4

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?

NAME

ADDRESS

NO. OF WELLS: PRODUCING 12

INJECTION

INACTIVE

ABANDONED 4

STATUS OF BOND

☐ SINGLE WELL

AMOUNT \$

☒ BLANKET BOND

AMOUNT \$ 20,000.00

☒ ON FILE

☐ ATTACHED

REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING/INJECTION ZONE AND EXPECTED NEW INJECTION ZONE; USE BACK OF FORM IF NEEDED)

PROPOSED CASING PROGRAM

APPROVED CASING — TO BE FILLED IN BY STATE GEOLOGIST

AMOUNT	SIZE	WT/FT	AMT. OF CEM.	AMOUNT	SIZE	WT/FT	AMT. OF CEM.
20'	6 1/4	14#	3	11	11	11	11
300	2 7/8	6.5#	40	11	11	11	11

I, the undersigned, state that I am the Partner of the Town Oil Co.

(company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.

SIGNATURE

Leith Town

DATE

9-5-97

PERMIT NUMBER

20650

APPROVED DATE

5/14/98

APPROVED BY

James Holly Williams

☒ DRILLER'S LOG REQUIRED

☒ E-LOGS REQUIRED IF RUN

☒ CORE ANALYSIS REQUIRED IF RUN

☒ DRILL STEM TEST INFO. REQUIRED IF RUN

☐ SAMPLES REQUIRED

☒ SAMPLES NOT REQUIRED

☐ WATER SAMPLES REQUIRED AT

NOTE ▶

THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION. APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE.

I _____ of the _____

Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized Council representative.

DRILLER'S SIGNATURE _____

DATE _____

PROPOSED OPERATIONS DATA

PROPOSED AVERAGE DAILY INJECTION,	PRESSURE <u>200</u> PSIG, RATE <u>25</u> BPD/GPM, VOLUME _____ BBL/GAL
APPROVED AVERAGE DAILY INJECTION, (TO BE FILLED IN BY STATE GEOLOGIST).	PRESSURE <u>200</u> PSIG, RATE <u>25</u> BPD/GPM, VOLUME _____ BBL/GAL
PROPOSED MAXIMUM DAILY INJECTION,	PRESSURE <u>350</u> PSIG, RATE <u>50</u> BPD/GPM, VOLUME _____ BBL/GAL
APPROVED MAXIMUM DAILY INJECTION, (TO BE FILLED IN BY STATE GEOLOGIST).	PRESSURE <u>350</u> PSIG, RATE <u>50</u> BPD/GPM, VOLUME _____ BBL/GAL

ESTIMATED FRACTURE PRESSURE/GRADIENT OF INJECTION ZONE _____ PSI/FOOT

DESCRIBE THE SOURCE OF THE INJECTION FLUID

NOTE ► SUBMIT AN APPROPRIATE ANALYSIS OF THE INJECTION FLUID. (SUBMIT ON SEPARATE SHEET)

DESCRIBE THE COMPATIBILITY OF THE PROPOSED INJECTED FLUID WITH THAT OF THE RECEIVING FORMATIONS, INCLUDING TOTAL DISSOLVED SOLIDS COMPARISONS.

GIVE AN ACCURATE DESCRIPTION OF THE INJECTION ZONE INCLUDING LITHOLOGIC DESCRIPTIONS, GEOLOGIC NAME, THICKNESS, DEPTH, POROSITY, AND PERMEABILITY.

GIVE AN ACCURATE DESCRIPTION OF THE CONFINING ZONES INCLUDING LITHOLOGIC DESCRIPTION, GEOLOGIC NAME, THICKNESS, DEPTH, POROSITY, AND PERMEABILITY.

SUBMIT ALL AVAILABLE LOGGING AND TESTING DATA ON THE WELL

GIVE A DETAILED DESCRIPTION OF ANY WELL NEEDING CORRECTIVE ACTION WHICH PENETRATES THE INJECTION ZONE IN THE AREA OF REVIEW (½ MILE RADIUS AROUND WELL). INCLUDE THE REASON FOR AND PROPOSED CORRECTIVE ACTION.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

Form OGC-5

☐ NEW WELL ☐ WORKOVER ☐ DEEPEN ☐ PLUG BACK ☒ INJECTION ☐ SAME RESERVOIR ☐ DIFFERENT RESERVOIR ☐ OIL ☐ GAS ☐ DRY

OWNER Pense Bros. Drilling Co., Inc.		ADDRESS 800 Newberry St. Fredericktown, Mo. 63645	
LEASE NAME Hönsinger		WELL NUMBER 3-W	
LOCATION 2720' FNL 2300' FEL		SEC. TWP. AND RANGE OR BLOCK AND SURVEY 5-T43N-R33W	
COUNTY Cass	PERMIT NUMBER (OGC-3 OR OGC-31) 20650		
DATE SPUDDED 9-22-97	DATE TOTAL DEPTH REACHED 9-12-97	DATE COMPLETED READY TO PRODUCE OR INJECT 9-12-97	ELEVATION (DF, RKR, RT, OR GR.) FEET 950
TOTAL DEPTH 295	ELEVATION OF CASING HD. FLANGE FEET		
PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION 248-258		ROTARY TOOLS USED (INTERVAL) TO 295	CABLE TOOLS USED (INTERVAL)
DRILLING FLUID USED water	WAS THIS WELL DIRECTIONALLY DRILLED? No		DATE FILED
WAS DIRECTIONAL SURVEY MADE?			DATE FILED
TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST) Gamma Ray Neutron enclosed			DATE FILED

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
Surface	9 3/4	6 1/4	14	20	3	0
Completion	5/58	2 7/8	6.5	282	38	0

TUBING RECORD

LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
NO	IN.	FEET	INCH	FEET	FEET		FEET

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FOOT	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
2	2 1/8 alum jets	248-258	25 bbls gelled water 5 sx sand	248-258

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION		PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING — IF PUMPING, SHOW SIZE AND TYPE OF PUMP.)					
DATE OF TEST 10-6-97	HOURS TESTED MIT 600#	CHOKE SIZE	OIL PRODUCED DURING TEST bbls.	GAS PRODUCED DURING TEST MCF	WATER PRODUCED DURING TEST bbls.	OIL GRAVITY API (CORR.)	
TUBING PRESSURE	CASING PRESSURE	CAL'D RATE OF PRODUCTION PER 24 HOURS		OIL bbls.	GAS MCF	WATER bbls.	GAS OIL RATIO

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD)

METHOD OF DISPOSAL OF MUD PIT CONTENTS

Hauled off and covered with dirt

DEC 14 1998

MO Oil & Gas Council
Partner

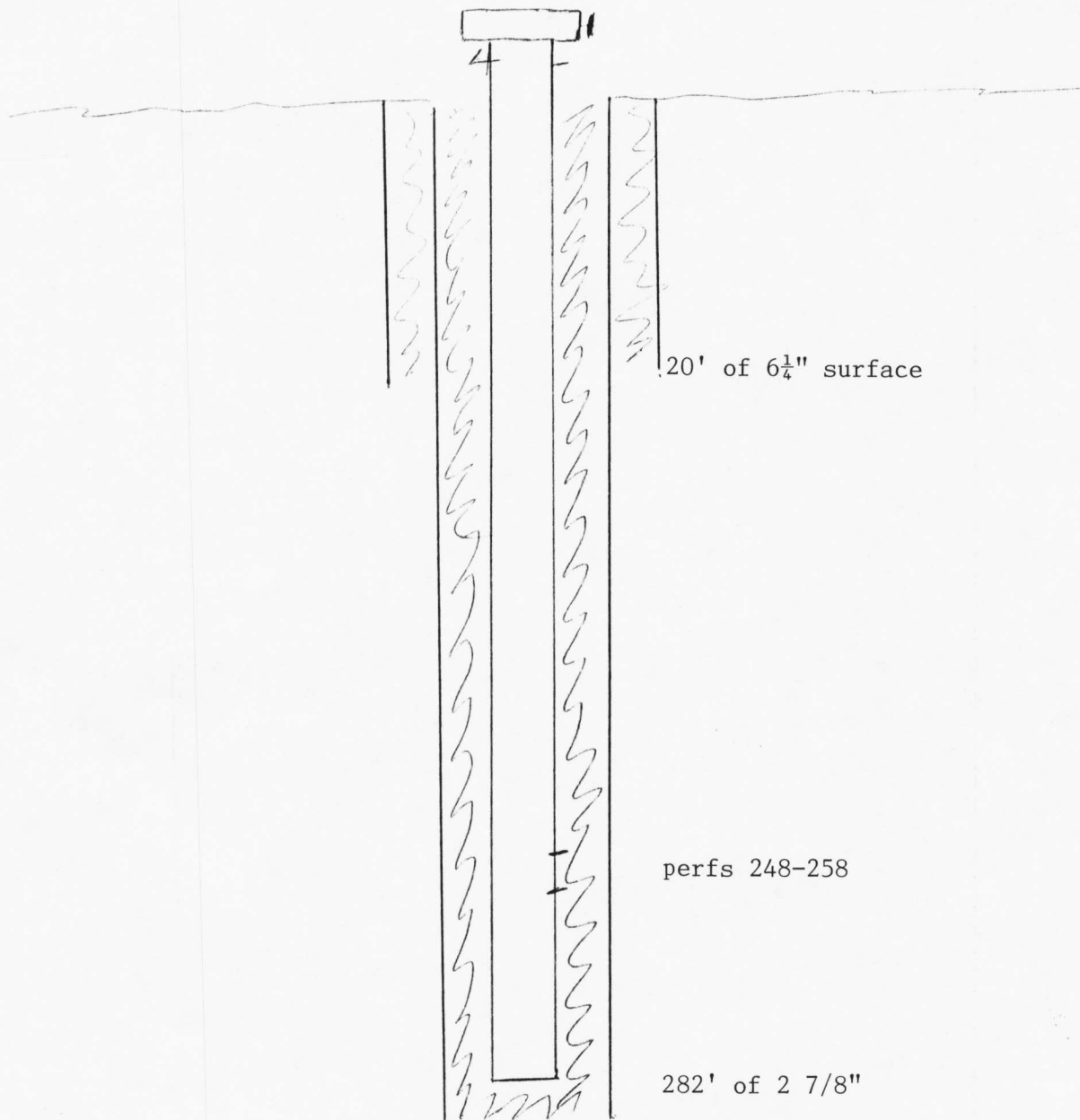
CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE _____ OF THE _____ COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DATE 12-4-98	SIGNATURE Lester Town by djb
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MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
INJECTION WELL SCHEMATIC

COUNTY Cass	PERMIT NUMBER	OPERATOR Pense Bros Drilling Co.	WELL NUMBER Honsinger 3-W
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INSTRUCTIONS ON THE ABOVE SPACE DRAW A NEAT, ACCURATE SCHEMATIC DIAGRAM OF THE APPLICANT INJECTION WELL, INCLUDING THE FOLLOWING: CONFIGURATION OF WELL HEAD, TOTAL DEPTH OR PLUG BACK TOTAL DEPTH, DEPTH OF ALL INJECTION OR DISPOSAL INTERVALS, AND THEIR FORMATION NAMES, LITHOLOGY OF ALL FORMATIONS PENETRATED, DEPTHS OF THE TOPS AND BOTTOMS OF ALL CASING AND TUBING, SIZE AND GRADE OF ALL CASING AND TUBING, AND THE TYPE AND DEPTH OF PACKER, DEPTH, LOCATION, AND TYPE OF ALL CEMENT, DEPTH OF ALL PERFORATIONS AND SQUEEZE JOBS, AND GEOLOGIC NAME AND DEPTH TO BOTTOM OF ALL UNDERGROUND SOURCES OF DRINKING WATER WHICH MAY BE AFFECTED BY THE INJECTION. USE BACK IF ADDITIONAL SPACE IS NEEDED, OR ATTACH SHEET

Well #3-W
Farm: Honsinger
Cass County, MO.
Lease Owner: Pense Bros Drilling Co., Inc

WELL LOG

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total Depth</u>
6	Soil & clay	6
5	Lime	11
10	Shale	21
31	Lime	52
8	Shale & slate	60
20	Lime	80
6	Shale & slate	86
1	Lime	87
2	Shale & slate	89
6	Lime	95 Hertha
6	Shale shells	101
19	Shale	120
14	Sand	134
72	Shale	206
7	Sand	213
25	Shale	238
2	Shale	240
3	Sand	243
1	Sandy lime	244
5	Lime	249
4	Sand	253
2	Sand	255
2	Lime	257
6	Sand	263
3	Sandy shale	266
29	Shale	295 TD

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MO Oil & Gas Council

MECHANICAL INTEGRITY TEST REPORT

RECEIVED

Test Date: 14 NOV-07

DEC 11 2007

Operator: Town Oil Company, Inc.
Contact Person: Lester Town
Address: 16205 West 287th St. Paola, Kansas 66071
Phone: 913-294-2125

Oil & Gas Council

Lease Honsinger Well # 3-W
County CASS Permit # 20650

TEST INFORMATION:

Type MIT: Pressure Radioactive Tracer Survey Temperature Survey

	Run #1	Run #2	Run #3
Start Time:	<u>12:30</u>	<u> </u>	<u> </u>
End Time:	<u>1:30</u>	<u> </u>	<u> </u>

Length of Test: 1 hr
(Start Time minus End Time)

Initial Pressure (PSI): 110 #
Ending Pressure (PSI): 105 #
Pressure Change: 105 #
(Initial Pressure minus Ending Pressure)

Fluid used for test (water, nitrogen, CO2, ect.): air

Comments about test: Perf 248-258 TD 212
Full of Fluid
248 x .43 = 106.64

The bottom of the tested zone is shut in with air Cement
at a depth of 272 ft. In signing the form below, it is certified
that the above indicated well was tested for mechanical integrity on the
date shown at the top of this page.

Signed: Stacy A. Hamelke EOR
Operator Contact Person or Title
Approved Agent

DO NOT WRITE BELOW THIS LINE

Results were: Satisfactory ✓ Not Satisfactory
State Agent: Jeff JAQUES Witnessed: Yes No X

REMARKS:
Computer Update ✓ FILE WITH PERMIT!

OGC Misc Form 1

MECHANICAL INTEGRITY TEST REPORT

RECEIVED

NOV 15 2002

MO Oil & Gas Council

Test Date: 8 Nov 2002

Operator: Town Oil Company, Inc.
 Contact Person: Lester Town
 Address: 16205 West 287th St. Paola, Kansas 66071
 Phone: 913-294-2125

Lease HONSINGER Well # 3W
 County CASS Permit # 20638 20650

TEST INFORMATION:

Type MIT: Pressure ☒ Radioactive Tracer Survey ☐ Temperature Survey ☐

	Run #1	Run #2	Run #3
Start Time:	<u>12:00</u>		
End Time:	<u>12:40</u>		
Length of Test:	<u>40 min</u>		
(Start Time minus End Time)			

$$40 + (248' \times .433) = 147.38$$

Initial Pressure (PSI): 146 #
 Ending Pressure (PSI): 146 #
 Pressure Change: 0
 (Initial Pressure minus Ending Pressure)

Fluid used for test (water, nitrogen, CO2, ect.): AirComments about test: Perforations: 248-258 TD-272'

248 ft of Fluid X .43 = 106 # + 40 # Back Pressure = 146 #

The bottom of the tested zone is shut in with Cement
 at a depth of 272 ft. In signing the form below, it is certified
 that the above indicated well was tested for mechanical integrity on the
 date shown at the top of this page.

Signed: Steele P. Hainbueke EOR
 Operator Contact Person or Title
 Approved Agent

DO NOT WRITE BELOW THIS LINE

Results were: Satisfactory ☒ Not Satisfactory ☐
 State Agent: no Witnessed: Yes ☐ No ☒

REMARKS:

Computer Update ☒

FILE WITH PERMIT!

OGC Misc Form 1

CONSOLIDATED INDUSTRIAL SERVICES, INC.
211 W. 14TH STREET, CHANUTE, KS 66720
316-431-9210 or 800-467-8676

TICKET NUMBER 09291

LOCATION Ottawa

FOREMAN Alan Mader

TREATMENT REPORT

DATE <u>10-6-97</u>	CUSTOMER ACCT # <u>7823</u>	WELL NAME <u>Honsinger 3-W</u>	QTR/QTR	SECTION	TWP	RGE	COUNTY <u>Cass. Mo.</u>	FORMATION
CHARGE TO <u>Town Oil</u>				OWNER				
MAILING ADDRESS <u>16205 W 287 St.</u>				OPERATOR				
CITY <u>Paola</u>				CONTRACTOR <u>Town</u>				
STATE <u>KS</u>		ZIP CODE <u>66071</u>		DISTANCE TO LOCATION <u>45</u>				
TIME ARRIVED ON LOCATION <u>10:30</u>				TIME LEFT LOCATION <u>11:30</u>				

WELL DATA	
HOLE SIZE <u>5 7/8"</u>	
TOTAL DEPTH <u>295'</u>	
CASING SIZE <u>2 7/8"</u>	
CASING DEPTH <u>275'</u>	
CASING WEIGHT	
CASING CONDITION	
TUBING SIZE	
TUBING DEPTH	
TUBING WEIGHT	
TUBING CONDITION	
PACKER DEPTH	
PERFORATIONS	
SHOTS/FT	
OPEN HOLE	
TREATMENT VIA	

INSTRUCTIONS PRIOR TO JOB

TYPE OF TREATMENT

- | | |
|---|---|
| <input type="checkbox"/> SURFACE PIPE | <input type="checkbox"/> ACID BREAKDOWN |
| <input checked="" type="checkbox"/> PRODUCTION CASING | <input type="checkbox"/> ACID STIMULATION |
| <input type="checkbox"/> SQUEEZE CEMENT | <input type="checkbox"/> ACID SPOTTING |
| <input type="checkbox"/> PLUG & ABANDON | <input type="checkbox"/> FRAC |
| <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> FRAC + NITROGEN |
| <input type="checkbox"/> MISC PUMP | <input type="checkbox"/> FOAM FRAC |
| <input type="checkbox"/> OTHER | <input type="checkbox"/> NITROGEN |

PRESSURE LIMITATIONS

	THEORITICAL	INSTRUCTED
SURFACE PIPE		
ANNULUS LONG STRING		
TUBING		

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MO Oil & Gas Council

JOB SUMMARY

DESCRIPTION OF JOB EVENTS Establish circulation with clean water. Mixed & pumped 1sx gel followed by app 5 bbl clean water. Mixed & pumped 38sx 50/50 m2 2% gel. Circulated cen. to surf. Pumped 2 1/2 rubber plug to pin at 275'. Well held 600th for 30 min M I T. Closed valve.

A

Alan Mader

PRESSURE SUMMARY

BREAKDOWN or CIRCULATING	psi
FINAL DISPLACEMENT	psi
ANNULUS	psi
MAXIMUM	psi
MINIMUM	psi
AVERAGE	psi
ISIP	psi
5 MIN SIP	psi
15 MIN SIP	psi

AUTHORIZATION TO PROCEED

TREATMENT RATE

BREAKDOWN BPM
INITIAL BPM
FINAL BPM
MINIMUM BPM
MAXIMUM BPM
AVERAGE BPM

HYD HHP = RATE x PRESSURE x 40.8

TITLE

DATE